#### Claim

- 1, one kind is applicable to the adjustable liquid crystal display of hanging on a wall, characterized in including: a LCDs curtain; An adjustable rotatory couple, the connection is used for fixing on the wall at this LCDs curtain back, and this adjustable rotatory couple is used for producing and controls rotatoryly and a lateral bracing frame including a longitudinal bracing frame, and is perpendicular crisscross with this longitudinal bracing frame, is used for producing rotatoryly from top to bottom.
- 2. liquid crystal display according to claim 1 adjustable characterized in further including: a control motor, loads at this adjustable rotatory couple, is used for controlling this longitudinal bracing frame and this lateral bracing frame function, and then rotatory with from top to bottom about producing respectively.
- 3. liquid crystal display according to claim 2 adjustable, characterized in further including: a wireless remote control generator is used for seeing off a wireless signal; A wireless receiver of remote-control system loads at this LCDs curtain, be used for receiving this wireless signal after, the messenger should control the motor comes into operation.

### Adjustable liquid crystal display

This utility model relates to a liquid crystal display, especially relates to one kind and can carry out controlling from top to bottom the adjustment of orientation to the LCDs curtain, reaches the adjustable liquid crystal display that the user obtained the best angle.

Liquid crystal (Liquid Crystal, LC) is the material between solid and liquid, when receiving the influencing of effects such as extra electric field, magnetic field and heat, the molecular arrangement (Molecular Orientation) of liquid crystal can along with receive plus act on and change, make the various photoelectric properties of liquid crystal change. Consequently we usable plus be used for the photoelectric characteristic of modulation liquid crystal, lead to the fact the visual effect of difference, and are applied to the preparation of liquid crystal display.

Advantages such as the liquid crystal display has gently, thin, small, low-voltage drive, low consumption electric power and range of application are wide, and by in the wide application what, small-size portable television, mobile phone, shoot with video-corder consumption nature electronics or computer products such as putting shadow machine, notebook computer, console display and projection television. And will replace the mainstream that picture tube (CRT) becomes the display gradually.

With the computer of wall-hanging liquid crystal display at present commonly used, owing to fix on the wall, so generally can only use in the dead ahead time, just have the analytic effect of preferred. If have the orientation not not just or the situation of the reflection of light when taking place, just lead to the fact the liquid crystal display to show the phenomenon of fuzziness very easily.

Have mirror what here, this utility model provides an adjustable liquid crystal display exactly. To hanging at the fixed liquid crystal display of wall, still can be according to user's sight angle, adjustment about doing.

This utility model provides an adjustable liquid crystal display, is applicable to to hang on a wall, includes to comprise LCDs curtain and adjustable rotatory couple. Wherein, the LCDs curtain is used for showing the receipt signal, and adjustable rotation couple is connected at LCDs curtain back, is used for fixing on the wall, and adjustable rotation couple includes a longitudinal bracing frame in addition, and a rotation and a lateral bracing frame interlock with the longitudinal bracing frame is perpendicular about being used for producing, rotation about being used for producing.

In addition, the multiplicable design of this utility model No. 1 control motor loads on adjustable rotatory couple, is used for controlling longitudinal bracing frame and the function of lateral bracing frame, and rotatory with from top to bottom about producing respectively, and mode that can the power consumption child-operation is adjusted, and need not be with the manual regulation mode. In addition, see a wireless signal off as if the wireless remote control generator that redesigns. And wireless receiver of remote-control sytem loading what LCDs curtain, then can receive wireless signal Hou, make the control motor come into operation, and reach the mode of wireless remote control, provide more convenient to the user

The operation mode.

For letting the aforesaid of this utility model can be more obviously understandable with other purposes, characteristic and advantage, the special preferred embodiment of lifting coordinates the figure to do the elaboration:

- Fig. 1 is the front elevation of an adjustable liquid crystal display of this utility model preferred embodiment;
- Fig. 2 is the side elevation view of an adjustable liquid crystal display of this utility model preferred embodiment;
- Fig. 3 is the back view of an adjustable liquid crystal display of this utility model preferred embodiment.

According to Fig. 1 - 3, their divide maybe this utility model preferred embodiment an adjustable liquid crystal display front elevation, side elevation view and back view. In Fig. 1, we can find out the adjustable liquid crystal display of this utility model, including 12 components on the LCDs curtain 10 and adjustable rotatory couple. Wherein, LCDs curtain 10 is used for showing the receipt signal, adjustable rotatory couple 12 item the connection in LCDs curtain 10 backs, as Fig. 2 and Fig. 3, we can find out clearly that wherein above-mentioned adjustable rotatory 12 one end 18 of couple are used for fixing on the wall, the other end 20 is item be connected to 10 backs on the LCDs curtain, and adjustable rotatory couple 12 includes 16 components on longitudinal bracing frame 14 and the one lateral bracing frame in 20 those one end, wherein longitudinal bracing frame 14 and lateral bracing put up 16 both be perpendicular and interlock, can design connection each other or unconnected situation each other.LCDs curtain 10 with longitudinal bracing frame 14 regard as produce about rotatory main shaft, lateral bracing frame 16 is item the main shafts of rotation about producing as LCDs curtain 10. Wherein, above-mentioned longitudinal bracing frame 14 and lateral bracing frame 16 both, but except end user for control, also can install a control motor (demonstration) additional on adjustable rotatory couple, be used for controlling longitudinal bracing frame 14 and 16 functions on the lateral bracing frame, and rotatory with from top to bottom about coming to produce respectively with the electronic control mode. In addition, for the person's operation that does not further facilitate the use, we also can design a wireless remote control generator (demonstration), see a wireless signal under remote off. And after 22 (reference diagram 1 is shown) of the wireless receiver of remote-control sytem of design supratentorial the LCDs are used for receiving this wireless signal, make the control motor come into operation.

In sum, this utility model provides an adjustable liquid crystal display, can fix behind the wall the computer of wall-hanging adjustable liquid crystal display, can be according to user's vision angle, and the adjustment about doing, and cooperation motor or similar rotation ware, adjust with the remote controller.

Though this utility model discloses with the preferred embodiment to some extent, right its is used for prescribing a limit to this utility model, and any familiar this technological person in the spirit and scope that does not break away from this utility model, probably do some change and retouching, so the protection domain of this utility model should be as the criterion with the claims confining spectrum of patenting.

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## [12] 实用新型专利说明书

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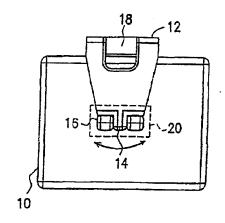
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权利要求书1页 说明书2页 附图页数1页

#### [54]实用新型名称 可调式液晶显示器 [57]指要

一种可调式液晶显示器,其适用于固定挂在一墙壁上,并能进行上下左右调整,以达到使用者控制获得最佳的角度。其包括由液晶显示屏幕与可调式旋转挂钩所构成。其中液晶显示屏幕用以显示接收信号,可调式旋转挂钩连接在液晶显示屏幕背部,用以固定在墙壁上。其中可调式旋转挂钩包括一纵向支撑架产生左右旋转,以及一横向支撑架与纵向支撑架垂直交错,产生上下旋转。



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## 权 利 要 求 书

- 1、一种适用于挂在一墙壁上的可调式液晶显示器,其特征在于包括:一液晶显示屏幕;一可调式旋转挂钩,连接在该液晶显示屏幕背部,用以固定在墙壁上,该可调式旋转挂钩包括一纵向支撑架,用以产生左右旋转以及一横向支撑架,与该纵向支撑架垂直交错,用以产生上下旋转。
- 2. 如权利要求1所述的可调式液晶显示器,其特征在于进一步包括:一控制马达,装载在该可调式旋转挂钩,用以控制该纵向支撑架与该横向支撑架运作,进而分别产生左右旋转与上下旋转。
- 3. 如权利要求2所述的可调式液晶显示器,其特征在于进一步包括:一无线遥控产生器,用以送出一无线信号;一无线遥控接收器,装载在该液晶显示屏幕,用以接收该无线信号后,使该控制马达开始运作。

#### 可调式液晶显示器

本实用新型涉及一种液晶显示器,尤其是涉及一种可以对液晶显示屏幕进行上下左右方向的调整,达到使用者获得最佳的角度的可调式液晶显示器。

液晶(Liquid Crystal, LC)是介于固体与液体之间的物质,当受到外加电场、磁场及热等作用的影响时,液晶的分子排列(Molecular Orientation)会随着所受外加作用而改变,使得液晶的各种光电性质发生变化。因此我们可利用外加作用来调变液晶的光电特性,造成不同的视觉效果,并应用于液晶显示器的制作。

液晶显示器具有轻、薄、体积小、低电压驱动、低消耗电功率及应用范围广等优点,而被广泛应用於中、小型便携式电视、移动电话、摄录放影机、笔记型电脑、台式显示器、以及投影电视等消费性电子或电脑产品。且将逐渐取代显像管(CRT)成为显示器的主流。

以目前常用的壁挂式液晶显示器的电脑而言,由于是固定在墙壁上,所以一般只能在正前方使用时,才有较佳的解析效果。倘若有方向不正或反光的情形发生时,就很容易造成液晶显示器显示不清楚的现象。

有鉴於此,本实用新型就是提供一种可调式液晶显示器。对挂在墙壁固定的液晶显示器,仍然可以根据使用者的视线角度,来作上下左右的调整。

本实用新型提供一种可调式液晶显示器,适用于挂在一墙壁上,包括由液晶显示屏幕与可调式旋转挂钩所构成。其中,液晶显示屏幕用以显示接收信号,而可调式旋转挂钩连接在液晶显示屏幕背部,用以固定在墙壁上,此外可调式旋转挂钩包括一纵向支撑架,用以产生左右旋转以及一横向支撑架与纵向支撑架垂直交错,用以产生上下旋转。

另外,本实用新型可增加设计一控制马达,装载在可调式旋转挂钩上,用以控制纵向支撑架与横向支撑架运作,而分别产生左右旋转与上下旋转,可以用电子操作的方式来调整,而不需要以人工调整方式。此外,若再设计一无线遥控产生器送出一无线信号。以及一无线遥控接收器装载於液晶显示屏幕,则可接收无线信号後,使控制马达开始运作,而达到无线遥控的方式,对使用者提供更方便



的操作方式。

为让本实用新型的上述和其他目的、特征、和优点能更明显易懂,特举较佳实施例,配合附图作详细说明:

图1为本实用新型一较佳实施例的一种可调式液晶显示器的正面图:

图2为本实用新型一较佳实施例的一种可调式液晶显示器的侧视图:

图3为本实用新型一较佳实施例的一种可调式液晶显示器的背面图。

参照图1—3,它们分别是本实用新型一较佳实施例的一种可调式液晶显示器正面图、侧视图以及背面图。在图1中,我们可以看出本实用新型的可调式液晶显示器,包括液晶显示屏幕10与可调式旋转挂钩12所构成。其中,液晶显示屏幕10用以显示接收信号,而可调式旋转挂钩12则连接在液晶显示屏幕10背部,如图2与图3中,我们可以清楚地看出,其中上述可调式旋转挂钩12一端18用以固定在墙壁上,而另一端20则连接到液晶显示屏幕10背部,而可调式旋转挂钩12在20那一端包括一纵向支撑架14与一横向支撑架16所构成,其中纵向支撑架14与横向支撑架16两者为垂直交错,可以设计成彼此连接或彼此不连接的情形。液晶显示屏幕10以纵向支撑架14作为产生左右旋转的主轴,而横向支撑架16则作为液晶显示屏幕10产生上下旋转的主轴。其中,上述纵向支撑架14与横向支撑架16两者,除了可使用人为控制外,也可在可调式旋转挂钩上加装一控制马达(未显示),用以控制纵向支撑架14与横向支撑架16运作,而以电子控制方式来分别产生左右旋转与上下旋转。此外,为进一步方便使用者操作,我们也可以设计一无线遥控产生器(未显示),在远距离下送出一无线信号。并在液晶显示屏幕上设计一无线遥控接收器22(参考图1所示)用以在接收该无线信号后,使得控制马达开始运作。

综上所述,本实用新型提供一种可调式液晶显示器,可以对壁挂式的可调式液晶显示器的电脑,在固定在墙壁后,可以根据使用者的视觉角度,而作上下左右的调整,并配合马达或类似的转动器,用遥控器来进行调整。

虽然本实用新型已以较佳实施例有所揭示,然其并非用以限定本实用新型,任何熟悉此技术者,在不脱离本实用新型的精神和范围内,可能作些更动与润饰,因此本实用新型的保护范围应以申请专利的权利要求书所界定范围为准。



# 说 明 书 附 图

